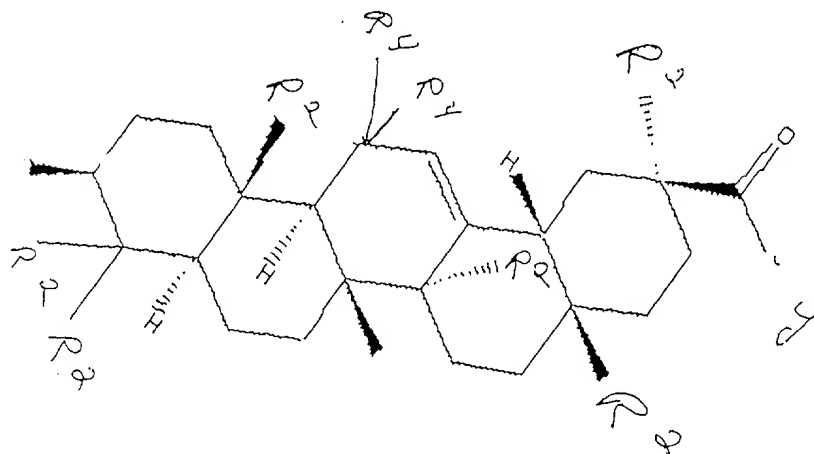


[illegible]

+


$$Y=OR^1, NR^1, O--M^1;$$

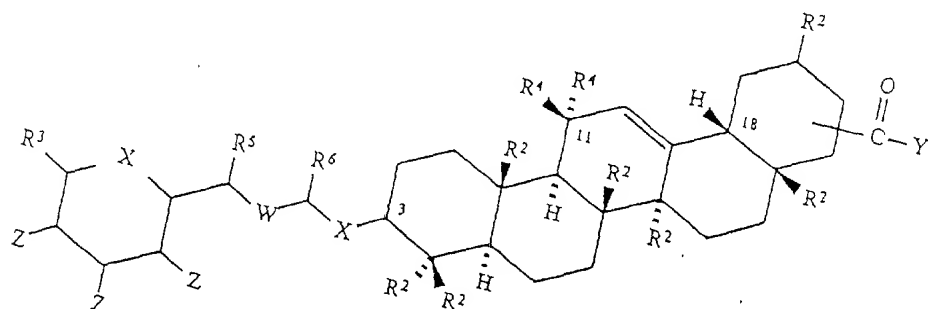
$M^+ = Na^+, K^+, Mg^{++}, Ca^{++}$ ions;

$R^4 = H, OH, SO_3^--M^1, NH(CH_2)_n NH^2$, or $NH-Ph-(NH_2)_n$ wherein $n=1-8$ and Ph is a phenyl or naphthyl ring substituted with up to 3 amine functionalities and the remaining substitutions can be H, R^1 , R^2 or $CO_2 R^1$;

or both R⁴ taken together are oxo;

$$X=O, S, NR^1_2,$$

2. A method of treating Kaposi's sarcoma comprising the steps of
 administering to the patient a derivative of a triterpenoid acid and wherein the
 triterpenoid acid has the following structural formula:



wherein:

$Y = OR^1, NR^1_2, O--M^1$;

$R^1 = H, \text{ LOWER ALKYL},$

$M^1 = Na.^+, K^+, Mg^{++}, Ca^{++} \text{ ions};$

$R^2 = CH^2OR^1 \text{ or } CH_3$;

$R^3 = H, CH_3, \text{ lower alkyl}, COY, CH_2OH, CH_2OCH_2CH=CH_2, CH_2OSO_3^-M^1$;

$Z = NR^1, NR^1Ac, NR^1Bz, H, OCH_3, \text{ lower alkyl}, OH, SO_3^-M^1, OCH_2CH=CH_2, OCH_2CO_2$

H or O-glucoside wherein a glucoside includes glucose, fucose, galactose, mannose, arabinose or xylose;

$R^4 = H, OH, SO_3^-M^1, NH(CH_2)_nNH^2, \text{ or } NH--Ph--(NH_2)_n$ wherein $n=1-8$ and Ph is a

phenyl or naphthyl ring substituted with up to 3 amine functionalities and the remaining substitutions can be H, R¹, R² or CO₂ R¹ ;

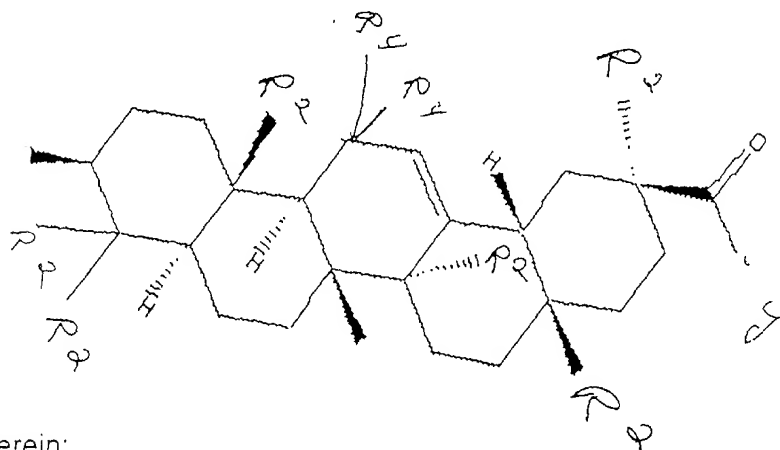
or both R⁴ taken together are oxo;

R⁵ and R⁶ =H, R¹ or taken together to form a 5 or 6 membered carbocyclic ring;

X= O,S, NR¹₂

W= C=O, C=CR¹₂, CR¹CR¹₃, CR¹--CR¹₂OR¹, COR¹--CR¹OR¹₂, COR¹CR¹₂OR¹, CR¹CR¹₂NR¹₂, CR¹CR¹₂OCR¹COY.

3. A pharmaceutical composition for treating Kaposi's sarcoma, comprising a therapeutically effective amount of a triterpenoid acid having the following structural formula:



wherein:

Y=OR¹, NR¹₂, O--M¹ ;

R¹ =H, LOWER ALKYL,

M¹ =Na.⁺, K⁺, Mg⁺⁺, Ca⁺⁺ ions;

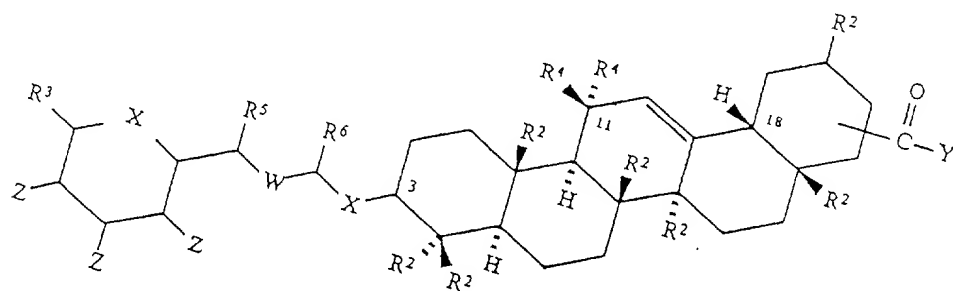
R² =CH²OR¹ or CH₃ ;

$R^4 = H, OH, SO_3^--M^1, NH(CH_2)_n NH^2$, or $NH--Ph--(NH_2)_n$ wherein $n=1-8$ and Ph is a phenyl or naphthyl ring substituted with up to 3 amine functionalities and the remaining substitutions can be H, R^1 , R^2 or $CO_2 R^1$;

or both R^4 taken together are oxo;

$X=O, S, NR^1_2$.

4. A pharmaceutical composition for treating Kaposi's sarcoma, comprising a therapeutically effective amount of a triterpenoid acid having the following structural formula:



wherein:

$Y=OR^1, NR^1_2, O--M^1$;

$R^1 = H, \text{ LOWER ALKYL,}$

$M^1 = Na.^+, K^+, Mg^{++}, Ca^{++}$ ions;

$R^2 = CH^2 OR^1$ or CH_3 ;

$R^3 = H, CH_3, \text{ lower alkyl, COY, } CH_2 OH, CH_2 OCH_2 CH=CH_2, CH_2 OSO--_3 M^1$;

$Z = NR^1, NR^1 Ac, NR^1 Bz, H, OCH_3, \text{ lower alkyl, OH, } SO_3 --M^1, OCH_2 CH=CH_2, OCH_2 CO_2$

H or O-glucoside wherein a glucoside includes glucose, fucose, galactose, mannose, arabinose or xylose;

$R^4 = H, OH, SO_3 --M^1, NH(CH_2)_n NH^2$, or $NH--Ph--(NH_2)_n$ wherein $n=1-8$ and Ph is a phenyl or naphthyl ring substituted with up to 3 amine functionalities and the remaining substitutions can be H, R^1 , R^2 or $CO_2 R^1$;

or both R^4 taken together are oxo;

R^5 and $R^6 = H, R^1$ or taken together to form a 5 or 6 membered carbocyclic ring;

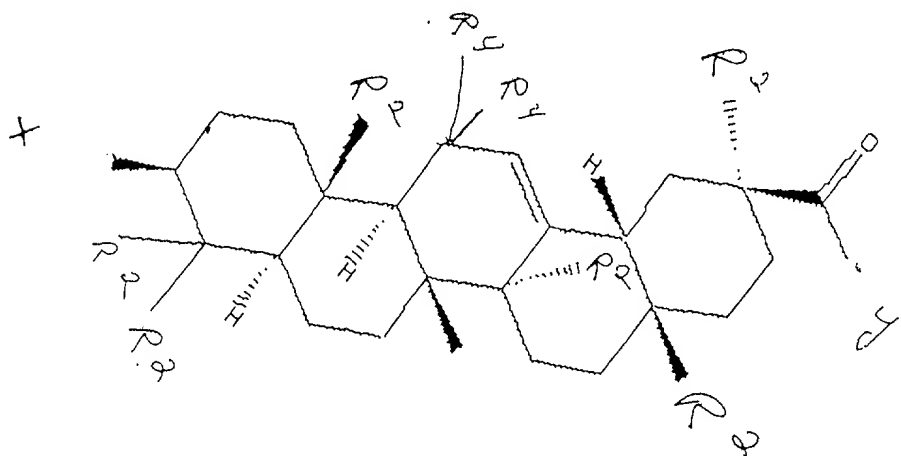
$X = O, S, NR^1_2$

$W = C=O, C=CR^1_2, CR^1 CR^1_3, CR^1 --CR^1_2 OR^1, COR^1 --CR^1 OR^1_2, COR^1 CR^1_2 OR^1, CR^1 CR^1_2 NR^1_2, CR^1 CR^1_2 OCR^1 COY$.

5. A method of treating Epstein Barr virus comprising the steps of

administering to the patient a therapeutic a derivative of a triterpenoid acid and

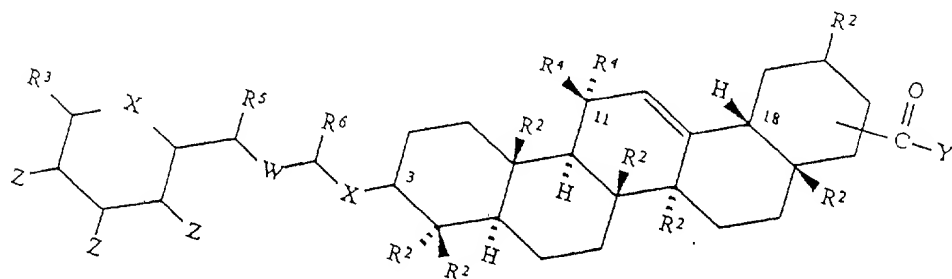
wherein the triterpenoid acid has the following structural formula:



[illegible]
$$X=O, S, NR^1_2.$$

administering to the patient a derivative of a triterpenoid acid and wherein the

triterpenoid acid has the following structural formula:



wherein:

$Y = OR^1, NR^1_2, O--M^1$;

$R^1 = H, \text{ LOWER ALKYL},$

$M^1 = Na.^+, K^+, Mg^{++}, Ca^{++}$ ions;

$R^2 = CH^2 OR^1 \text{ or } CH_3$;

$R^3 = H, CH_3, \text{ lower alkyl}, COY, CH_2 OH, CH_2 OCH_2 CH=CH_2, CH_2 OSO--_3 M^1$;

$Z = NR^1, NR^1 Ac, NR^1 Bz, H, OCH_3, \text{ lower alkyl}, OH, SO_3 --M^1, OCH_2 CH=CH_2, OCH_2 CO_2$

H or O-glucoside wherein a glucoside includes glucose, fucose, galactose, mannose, arabinose or xylose;

$R^4 = H, OH, SO_3 --M^1, NH(CH_2)_n NH^2, \text{ or } NH--Ph--(NH_2)_n$ wherein $n=1-8$ and Ph is a phenyl or naphthyl ring substituted with up to 3 amine functionalities and the remaining substitutions can be H, R^1, R^2 or $CO_2 R^1$;

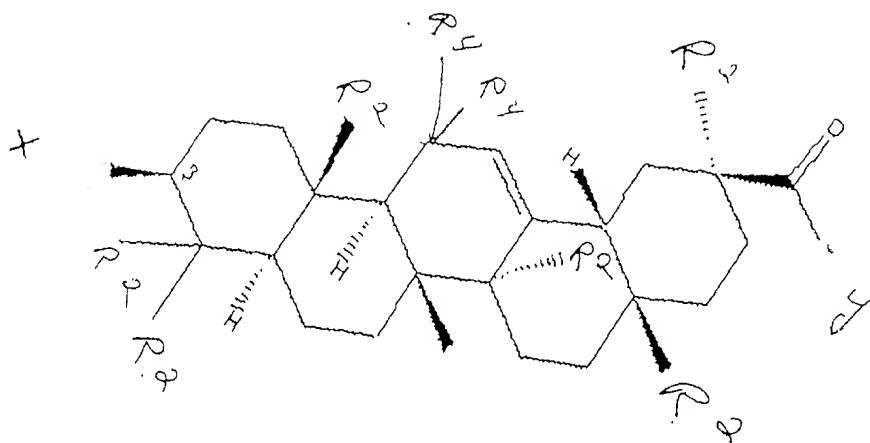
or both R^4 taken together are oxo;

R^5 and $R^6 = H, R^1$ or taken together to form a 5 or 6 membered carbocyclic ring;

$X = O, S, NR^1_2$

$W = C=O, C=CR^1_2, CR^1 CR^1_3, CR^1 --CR^1_2 OR^1, COR^1 --CR^1 OR^1_2, COR^1 CR^1_2 OR^1, CR^1 CR^1_2 NR^1_2, CR^1 CR^1_2 OCR^1 COY.$

7. A pharmaceutical composition for treating Epstein Barr virus, comprising a therapeutically effective amount of a triterpenoid acid having the following structural formula:



wherein:

$Y = OR^1, NR^1_2, O--M^1$;

$R^1 = H, \text{ LOWER ALKYL,}$

$M^1 = Na.^+, K^+, Mg^{++}, Ca^{++}$ ions;

$R^2 = CH^2OR^1 \text{ or } CH_3$;

$R^4 = H, OH, SO_3--M^1, NH(CH_2)_nNH^2$, or $NH--Ph--(NH_2)_n$ wherein $n=1-8$ and Ph is a

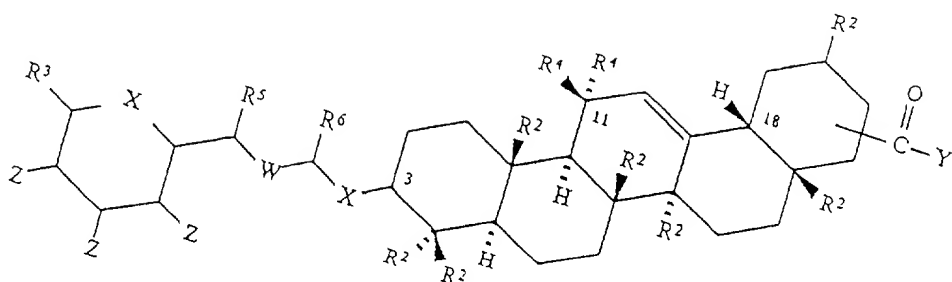
phenyl or naphthyl ring substituted with up to 3 amine functionalities and the remaining

substitutions can be H, R^1 , R^2 or CO_2R^1 ;

or both R^4 taken together are oxo;

$X = O, S, NR^1_2$.

8. A pharmaceutical composition for treating Epstein Barr virus, comprising a therapeutically effective amount of a triterpenoid acid having the following structural formula:



wherein:

$Y = OR^1, NR^1_2, O--M^1$;

$R^1 = H, \text{ LOWER ALKYL},$

$M^1 = Na^+, K^+, Mg^{++}, Ca^{++}$ ions;

$R^2 = CH^2OR^1 \text{ or } CH_3$;

$R^3 = H, CH_3, \text{ lower alkyl}, COY, CH_2OH, CH_2OCH_2CH=CH_2, CH_2OSO_3M^1$;

$Z = NR^1, NR^1Ac, NR^1Bz, H, OCH_3, \text{ lower alkyl}, OH, SO_3--M^1, OCH_2CH=CH_2, OCH_2CO_2$

H or O-glucoside wherein a glucoside includes glucose, fucose, galactose, mannose, arabinose or xylose;

$R^4 = H, OH, SO_3--M^1, NH(CH_2)_nNH^2, \text{ or } NH--Ph--(NH_2)_n$ wherein $n=1-8$ and Ph is a phenyl or naphthyl ring substituted with up to 3 amine functionalities and the remaining substitutions can be H, R^1, R^2 or CO_2R^1 ;

or both R^4 taken together are oxo;

R^5 and $R^6 = H, R^1$ or taken together to form a 5 or 6 membered carbocyclic ring;

$$X=O, S, NR^1_2$$
$$\begin{aligned} & \text{W=C=O, C=CR}^1_2, \text{CR}^1\text{CR}^1_3, \text{CR}^1\text{--CR}^1_2\text{OR}^1, \text{COR}^1\text{--CR}^1\text{OR}^1_2, \text{COR}^1\text{CR}^1_2\text{OR}^1, \\ & \text{CR}^1\text{CR}^1_2\text{NR}^1_2, \text{CR}^1\text{CR}^1_2\text{OCR}^1\text{COY}. \end{aligned}$$

9. The method according to claim 1 wherein the dosage is in the range of 2.5 mg to 50 mg/kg.

10. The method according to claim 5 wherein the dosage is in the range of 2.5 mg to 50 mg/kg.